Fiscal Year 2010 Appropriations Requests

Subcommittee on Commerce, Justice, Science, and Related Agencies

Project: Law Enforcement Automated Data Repository System (LEADR)
Recipient: County of Orangeburg
1520 Ellis Avenue Ext
Orangeburg, SC 29115
Amount: $500,000
Description: LEADR creates a bottoms-up approach using open source software. Today, during routine police activities, an officer can search on partial license tags, names and addresses to rapidly correlate past contacts. The system shows probable matches with red and yellow alerts indicating additional caution is needed. All of the data in the system is derived from local and state law enforcement as well as local, state and occasionally federal government records. This funding will expand the capacity of the system and allow for mapping and location awareness so law enforcement can coordinate activities and have a graphical and pictorial representation of patterns and activities. It will also allow for the continued expansion of the system to additional states, making LEADR an even more powerful tool for law enforcement.

Project: West Columbia Law Enforcement Communications
Recipient: City of West Columbia
200 North 12th Street
West Columbia, SC 29171
Amount: $350,000
Description: A relatively new technology, Automatic License Plate Recognition (ALPR), would assist the West Columbia Police Department in identifying offenders in real time, without waiting for information from the dispatcher. The ALPR technology allows vehicle license plates to be automatically scanned (up to 1,500 per minute) as officers patrol the city. The technology uses infrared scanning devices mounted on each patrol car, which recognize license plate numbers and compares them against multiple databases including wanted files, missing person files, AMBER alerts, terrorist watch lists, and gang databases. The technology then transmits data about the vehicle and the owner to the officers in the patrol vehicles, alerting them when a stop needs to be made. Using the ALPR technology, law enforcement officers can patrol with the benefit of getting data in real time, so they can interdict immediately.

Subcommittee on Defense

Project: Advanced Microscopy for Naval Ship Hull Protection
Recipient: Clemson University
201 Sikes Hall
Clemson, SC 29634
Amount: $1,600,000
Description: This project will support the purchase of a new microscope and associated equipment which will assist efforts to innovate and develop new and highly effective

maritime materials that will protect optical sensors and U.S. naval surface ships and submarines from the costly consequences of marine corrosion and biofouling. This project will improve fleet readiness and reliability and reduce both operational and maintenance costs for marine vessels. In addition to furthering these research efforts, the microscope will improve graduate and undergraduate microscopy education at Clemson University; both will help South Carolina create new jobs in a knowledge-based economy.

Project: Brain Injury Recovery Clinic
Recipient: University of South Carolina
208 Osborne Building – Pendleton Street
Columbia, SC 29208
Amount: $6,000,000
Description: The wounded have every right to expect the Congress and the Pentagon to also provide technologies and logistics to help recover and return them to duty or honorably discharge them with their country's thanks. This proposed technology program will help to return those men and women in the best state of mental health as possible to enjoy a fulfilling life with their families.

Project: Close Quarters Combat Research (Operation Razor's Edge)
Recipient: Government Training Institute
1349 Locust Avenue
Denmark, SC 29042
Amount: $1,200,000
Description: Operation Razor's Edge will provide empirical data for Close Quarter Battle/Close Quarters Combat (CQC/CQB) tactics and techniques and will supply critical analytical information to training organizations responsible for our nation's first responders and military personnel. CQB/CQC is conducted daily by U.S. first responders and military personnel around the globe. It is a critical component and a core competency for Law Enforcement SWAT Teams (including state, local and federal) and many U.S. military and allied personnel. CQC used to be reserved for Special Operation Forces (SOF) inside the U.S. military but has been a required piece of Urban Movement / fighting doctrine since 1993 for both SOF and General Purpose Forces (GPF).

Project: Cohort to Assess Readiness from Entry through Exit and Retirement (CAREER)
Recipient: South Carolina Research Authority (SCRA)
1330 Lady Street, # 503
Columbia, SC 29201
Amount: $4,500,000
Description: CAREER will generate numerous research and development employment opportunities but more importantly will be highly transferable to the public sector via broader recommendations that increase understanding of obesity, chronic disease, and other related health problems in persons across the life span; and population and minority-specific interventions aimed at children, young adults, and aging Americans, without limiting help only to military veterans.

Project: Controlled Humidity Protection for McEntire Joint National Guard Base (SCANG Facilities)
Recipient: South Carolina Air National Guard, McEntire JNGB
1325 South Carolina Rd., Eastover, SC 29044
Amount: $2,700,000
Description: CHP will be used to control humidity in aviation support facilities that house spare parts, tools, support and test equipment, munitions, and weapons. Traditional methods of corrosion control primarily mitigate the effect of moisture by employing corrective technologies to counteract existing corrosion damage. Such corrective methods are expensive, time consuming, and create additional serious challenges such as excess hazardous materials and hazardous waste. The most cost effective solution to the corrosion problem is through prevention, not correction.

Project: Dental Readiness Program, South Carolina National Guard
Recipient: South Carolina Army National Guard
1 National Guard Rd, Columbia, SC 29201
Amount: $1,500,000
Description: Dental Readiness is the #1 issue that causes soldiers to be non-deployable. Due to the high volume of soldiers requiring dental work, military dentists are overwhelmed. Dental work is currently being contracted out to civilian dentists at a great cost to the taxpayer. This cooperative initiative with the Medical University of South Carolina (MUSC) Dental School will allow South Carolina Guardsmen access to dental care at MUSC at no cost to the soldier. Dental students and staff will broaden their education experiences while SC Guardsmen will receive the mandatory dental care required to meet deployment standards.

Project: Eagle Vision
Recipient: South Carolina Air National Guard, McEntire JNGB
1325 South Carolina Rd., Eastover, SC 29044
Amount: $2,000,000
Description: This project will upgrade the Eagle Vision (EV4) system at McEntire JNGB to include a 1 meter infrared capability. The infrared capability will allow EV4 to look through all types of weather (hurricanes, tornadoes, cloud cover, etc) during the event for an immediate damage assessment. This will save American lives and property by planning for an increased response time to an effected area.

Project: Fort Jackson Renewable Energy Project
Recipient: EngenuitySC
1201 Main Street, Suite 250
Columbia, SC 29201
Amount: $3,550,000
Description: This project will create a “mini-grid” for providing renewable power to mission-critical electrical loads at Fort Jackson, South Carolina, using large stationary fuel cells operating on biogas generated from solid waste streams indigenous to the Fort.

It will assist the Army in meeting its on-site renewable energy generation goals, as well as meeting the security goal of segregating critical power requirements from non-critical power requirements, and producing a substantial portion of the critical power requirements on-site. The project will also provide a model for the Department of Defense to use at other installations to achieve these same goals. Finally, it will provide the Army with access to major renewable and alternative energy technology providers and partners through the Columbia region's existing hydrogen and fuel cell partnerships, as well as access to other fuel cell researchers and applied research programs underway in the region

Project: High Mobility Multi-Purpose Wheeled Vehicle (HMMWV)
Recipient: Trenton Plastics
601 E Wise Street
Trenton, SC 29847
Amount: $5,000,000
Description: Forces in theatre have experienced significant fire related casualties, burn injuries, total vehicle losses, and cargo and equipment losses due to fuel tank fires. Individual soldiers, units in the field as well as unified and specified commands have recognized fire suppression for fuel tanks as an immediate force protection necessity. These funds will allow the Army to purchase passive fuel tank suppression systems that not only save lives and prevent serious burn injuries, but also protect the massive investment the government has made in equipment and vehicles.

Project: Highly Integrated Production for Expediting Reset (HIPER)
Recipient: South Carolina Research Authority (SCRA)
1330 Lady Street, # 503
Columbia, SC 29201
Amount: $8,200,000
Description: This project will have an important impact on the Army as it will contribute greatly to the military efforts our troops are currently engaged in around the world and here at home. HIPER will implement a program which ensures the provision of the best and safest weaponry to the warfighter and in the quickest and most efficient way, by replacing parts and resetting weapons more quickly and at reduced cost. This will help keep our troops safe and fully equipped with the optimum defense mechanisms they need to effectively complete their missions, while using cutting-edge technology to reduce costs and lower wait times. To achieve this goal we will be relying on industry and government partners in numerous states, resulting in employment sustained and created via manufacturing and research requirements.

Project: Human Organ and Tissue Preservation Technology
Recipient: Lifeblood Medical
10120 Two Notch Road, Suite 2, Columbia, South Carolina 29223
Amount: $3,000,000
Description: The Human Organ and Tissue Preservation Technology (HOTPT) is a nutrient-rich, oxygen-carrying solution with the ability to preserve organs and tissues for a longer period of time than currently available solutions. This research will directly

benefit soldiers on the battlefield by reducing the number of amputated limbs by preserving limbs for an extended time for reattachment. This program also has the potential to increase the success rate of donated organs by prolonging their shelf life. This will help address the long list of people in need of a life saving transplant.

Project: M-249 SAW 5.56 mm machine gun
Recipient: FN Manufacturing, LLC
797 Old Clemson Road
Columbia, SC 29229
Amount: $22,100,000
Description: Because of widespread and heavy use in combat, M-249s are reaching the end of their service life. This request will support acquisition of new guns to replace those worn out in combat. The current M-249 IDIQ contract is scheduled to end in April 2010. Without adequate FY 2010 funding, a break in production will occur at FNM, allowing the line to "go cold", and jeopardizing an ample supply of this critical weapon during a time of continued conflict and uncertainty.

Project: Next Generation High Strength Glass Fibers for Ballistic Armor Applications
Recipient: AGY Holding Corporation
2556 Wagener Rd., Aiken, SC 29801
Amount: $3,300,000
Description: This program accelerates the development of next generation high strength glass fibers used in composite armoring materials. This means lighter, stronger composite vehicle armor without sacrificing the ballistic protection needed to maximize soldier survivability. Additionally, this program supports the domestic industrial base for armor materials production. Some of the glass fiber used in composite vehicle armors is manufactured outside the U.S. Developing the next generation high strength glass fibers at AGY will reduce dependency on foreign sources for a critical material, and also save U.S. jobs. Next generation high strength glass fibers can also be utilized by the commercial sector to lighten and improve armoring used on law enforcement vehicles and armored bank cars, resulting in better protection for personnel, improved fuel economy, and reduced emissions.

Project: Non-Gasoline Burning Engine
Recipient: Two Stroke International
8 Schein Loop
Beaufort, SC 29906
Amount: $1,900,000
Description: The Navy SEAL's currently use a 30 hp and 55 hp engine on their Combat Rubber Raiding Crafts. This effort is focused on the 30 hp engine. The program name for this outboard motor project is "Phoenix." The team broke down the existing motor to multiple elements; ignition system; carburetion; exhaust and intake silencing, lower unit, control apparatus, and enclosure cover. The goal of this effort is to provide the SEAL's with an advanced outboard reconnaissance engine that would burn multiple fuels (JP grades, gas, diesel, alcohol). It will be quiet for stealthy operations, have an extended

fuel range using a microwave ignition system currently in development, and a lower unit that allows it to go through mud and kelp without harming the engine. Additionally the engine will take advantage of the newest technology to be resistant to salt water that make the engines last longer, decrease weight and increase range.

Project: SOaR Recruiting Initiative
Recipient: Celebrate Freedom Foundation
455 St. Andrews Road, C-1
Columbia, SC 29210
Amount: $3,400,000
Description: The SOaR™ program ignites student interests in a broad range of military occupational skills through its utilization of modern high technology military jet turbine engines, helicopters, avionics, robotics, hydraulics, Unmanned Aerial Systems, tracked vehicle technology, hydrogen fuel cells, photovoltaic generators, and GPS devices, which are taken into schools and classrooms to assist students in connecting academic subjects to viable career fields. SOaR™ connects the military to the classroom in non-traditional ways, especially through focus on the concept of technology transfer from the military to the civilian world and the study of modern applications of transferred technology in various career fields.

Project: Special Operations Combat Assault Rifle (SCAR)
Recipient: FN Manufacturing, LLC
797 Old Clemson Road
Columbia, SC 29229
Amount: $4,300,000
Description: SCAR is the choice of U.S. Special Operations Command (US SOCOM) for a 21st century modular rifle "designed from the ground up" to meet demanding new war fighting requirements for Special Operations Forces. Funding will support a SCAR sniper support variant that was included on the FY 2009 US SOCOM Unfunded Priorities List. The sniper support rifle has an elongated upper receiver for the attachment of improved optics, and the support variant equips the second member of the two-man sniper team responsible for security of the team. The sniper support variant provides greater force protection and combat capability in the event the sniper team is attacked.

Project: Tactical Unmanned Aerial Vehicle (UAV) Heavy Fuel Engine
Recipient: XRD Inc. (XRD*i*)
103 Industrial Village Rd., Beaufort, SC 29906
Amount: $2,200,000
Description: Funding would be use for implementing XRD*i*'s lightweight military fuel engine for a Tactical UAV Heavy Fuel Engine program. The scope would include building sufficient engines to flight test and evaluate this technology for use in the U.S. Military environment. The funding would support economic development in the region and create more jobs for Beaufort, South Carolina by replacing an engine that is currently purchased from a foreign entity and is not heavy fuel capable. The funds would also support further development, design, and implementation of the manufacturing process to build this engine to military standards and support criteria.

Project: US Army Light Utility Helicopter (LUH) Aviation Combined Arms Tactical Trainer (AVCATT)
Recipient: South Carolina Army National Guard
1 National Guard Rd, Columbia, SC 29201
Amount: $4,000,000
Description: The Aviation Combined Arms Tactical Trainer (AVCATT) is the mobile, reconfigurable, collective flight simulator training system for all Army helicopters. Modification of the AVCATT to incorporate the Light Utility Helicopter (LUH) simulation provides a readily available and cost effective solution to practice essential crew training tasks in a simulated environment. It further leverages the Army's investment in a proven, effective, existing simulation program. Development of this capability using the original equipment manufacturer will ensure timely delivery via rapid integration, increased technical reliability and enhanced cost effectiveness.

Project: Vanadium Technology Program
Recipient: Advanced Technology Institute
5300 International Blvd.
North Charleston, SC 29418
Amount: $4,000,000
Description: The Vanadium Technology Program funds the research, development and prototype-testing necessary to implement vanadium alloyed steel into warfighter protection and mobility. This request builds on successes accomplished previously which include: reductions in weight, fabrication cost, and welding costs of 21%, 10%, and 53% respectively, leading to a smaller, higher-performing vanadium steel trailer design for the Army / Marine Joint Light Tactical Vehicle System; a longer span temporary bridge, designed by the Army Corps of Engineers and the University of South Carolina, to bridge road gaps in combat regions like Iraq; and, a new class of lighter, longer span trusses and joists, based on vanadium hot rolled steel angle shapes, have been developed and laboratory tested.

Project: Vibration Management Enhancement Program (VMEP)
Recipient: South Carolina Army National Guard
1 National Guard Rd, Columbia, SC 29201
Amount: $4,000,000
Description: This Conditioned Based Maintenance program saves taxpayer dollars for maintenance and repair of military helicopters. Through VMEP, parts failures are predicted and parts are not replaced because of a predicted life span but due to predicted failure. This program saves millions in taxpayer dollars. The program potentially saves American lives by an increased ready rate in aircraft used for emergency response operations.

Project: Virtual Interactive Combat Environment (V.I.C.E.) for the Basic Combat Training Center of Excellence at Fort Jackson, SC
Recipient: Dynamic Animation Systems, Inc.
12015 Lee Jackson Memorial Hwy, #200

Fairfax, VA 22033
Amount: $4,770,000
Description: The Virtual Interactive Combat Environment (V.I.C.E.) system is a needed training capability for Basic Combat Training. V.I.C.E. is a rapidly deployable solution that provides maintainable, adaptable systems which the Course Manager will use to more effectively train Soldiers of the Basic Combat Training Center of Excellence in their Warrior Tasks and Battle Drills, including IED Detect and Defeat. V.I.C.E. offers easily reconfigurable solutions that facilitate individual, fire team, and squad level training. Within this framework, V.I.C.E. provides the capability to support rapidly evolving rules of engagement (ROE) and strategic objectives associated with full-spectrum operations.

Subcommittee on Energy and Water Development

Project: Atlantic Intracoastal Waterway
Recipient: US Army Corps of Engineers
69A Hagood Avenue, Charleston, SC 29403
Amount: $1,000,000
Description: This request will fund the Army Corps of Engineers Charleston office to maintain 210 miles of the Atlantic Intracoastal Waterway in South Carolina, from the North Carolina –South Carolina state line above Little River Inlet to Port Royal Sound near Hilton Head.

Project: Innovista Army Corps of Engineers Planning
Recipient: City of Columbia
Post Office Box 147, Columbia, SC 29217
Amount: $750,000
Description: This project will fund the Army Corps of Engineers Charleston office to plan and review of the Congaree Regional Waterfront Park. The locally preferred plan for the Congaree Riverfront Regional Waterfront Park calls for development of a regional park and environmental restoration of vacant land along the Congaree River between Blossom and Gervais Streets. Specific plans call for wetland restoration, stream bank stabilization and restoration of a tributary stream flowing through the park, relocation of electricity transmission lines and a number of recreational amenities, including completion of the regional Three Rivers Greenway recreation trail.

Subcommittee on Interior, Environment, and Related Agencies

Project: Purrysburg Waterline Project
Recipient: Beaufort Jasper Water and Sewer Authority
6 Snake Road, Okatie, SC 29909
Amount: $1,500,000
Description: The project involves the construction of 49,000 feet of 36” diameter waterline along Purrysburg Rd from Becks Ferry Rd to Hwy 17 and 28,000 feet of 16” diameter waterline along Hwy 17 from Purrysburg Rd to Hwy 170A. This project is needed to provide water service to the proposed Jasper Port and the industrial/commercial development expected to occur in the project area.

Subcommittee on Military Construction, Veterans Affairs, and Related Agencies

Project: Joint Force Headquarters (TAG) Building at McEntire Joint National Guard Base
Recipient: South Carolina Air National Guard, McEntire JNGB
1325 South Carolina Rd., Eastover, SC 29044
Amount: $1,300,000
Description: The Army National Guard and Air National Guard state headquarters functions and the TAG Joint Staff are inefficiently dispersed. South Carolina Air National Guard (ANG) Headquarters is located in Building 260 while the remainder of the Joint Headquarters Staff is located approximately 12 miles away. Building 260 serving the State HQ staff was originally constructed in 1968 as an alert crew staging facility. This facility is aging, energy inefficient, and poorly sited and configured to effectively conduct staff functions, support current missions, carry out Total Force Integration (TFI) requirements, and implement joint-use initiatives. The dispersed locations of the joint staff and state headquarters create inefficiencies for all unit personnel. South Carolina ANG Headquarters is remote from other affiliated and coordinating functions. Training opportunities are lost due to organizational inefficiencies brought on by disjointed operations. Training rooms are too small and training space is at a premium. Office and meeting spaces lack privacy to enforce appropriate Operational Security and Communications Security. Administrative space that is available is inefficiently laid out.

Project: Ramp Upgrade Arm/De-Arm Pad at McEntire Joint National Guard Base
Recipient: South Carolina Air National Guard
1325 South Carolina Rd., Eastover, SC 29044
Amount: $4,700,000
Description: The 169th FW (flying twenty four F-16 aircraft and one C-130 fighter support aircraft) requires a properly sized and adequately configured aircraft parking apron and arm/disarm pads in support of the daily flying operations. Construction of an addition to the aircraft parking apron will provide space for parking, servicing, maintaining, loading and unloading aircraft assigned to the base and for the frequent transient aircraft on base. Additions to both arm/disarm pads are required to be used for both arming aircraft immediately prior to takeoff and the disarming ("safing") of aircraft weapons upon the aircraft's return.

Subcommittee on Transportation, Housing and Urban Development, and Related Agencies

Project: Bluffton Parkway Phase 5A
Recipient: County of Beaufort
100 Ribaut Road, Beaufort, SC 29902
Amount: $3,000,000
Description: This project will extend the Bluffton Parkway from S-7-163 to US 278. This facility would serve as an alternate route to US 278 offering improved connections,

alleviate congestion on US 278 and provide a more continuous limited-access roadway between SC 170 and Hilton Head Island. According to completed studies this project will significantly improve hurricane evacuation of Hilton Head Island and the surrounding communities.

Project: Bluffton Parkway Phase 6/7
Recipient: Town of Hardeeville
205 East Main Street, Hardeeville, SC 29927
Amount: $5,500,000
Description: Funding will construct a new 4 lane divided highway from US 170 to Interstate 95 and provide alternate hurricane evacuation route. Includes new interchange on I-95 at Mile Marker 3.

Project: I-95/US 301 Interchange Improvement
Recipient: Orangeburg County Development Commission
Post Office Box 1303, Orangeburg, SC 29116
Amount: $1,000,000
Description: Currently US Hwy 301 stops at the intersection of I-95, causing the 301 traffic to enter onto extremely busy I-95 for just one mile in order to exit off onto Hwy 6. This project continues US Hwy 301 over I-95, with continual and systematic flow to Hwy 6. With the installation of an interchange at the intersection of US Hwy 301 and I-95, traffic will be able to flow smoothly in all directions.

Project: Town of Lexington Unified Traffic Plan
Recipient: Town of Lexington
111 Maiden Lane, Lexington, SC 29072
Amount: $5,500,000
Description: The project scope is to construct improvements to the intersections along US Route 378 (Columbia Avenue) at Route S-127(Park Road), US Route 1 (W. Main) and Route S-131 (W. Butler Street). The purpose of the project is to relieve congestion along this continually developing corridor as well as improve traffic flow.

Project: Widening of Columbia Avenue (S-48)
Recipient: Town of Chapin
Post Office Box 183, Chapin, SC 29036
Amount: $1,000,000
Description: This project will widen 1.36 miles of Columbia Avenue (S-48) westward from its intersection with I-26 from its present two (2) lanes to five (5) lanes. The widening of Columbia Avenue is an extremely important project for the Chapin Community. This road is utilized as the primary transportation artery in and out of Chapin from I-26, it greatly impacts the safety of Chapin High School, it impacts commerce in Chapin, and its accessibility by emergency vehicles is critical for life safety of their citizens and visitors.